STIC-ILL NO 5/15

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:37 AM
T : STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

Importance: High

06146078 89161496 PMID: 2922510
Enzyme variation and pathogenicity of recent field isolates of Eimeria tenella.
Shirley M W; Chapman H D; Kucera J; Jeffers T K; Bedrnir P
Institute for Animal Health, Houghton Laboratory, Huntingdon, Cambridgeshire.
Research in veterinary science (ENGLAND) Jan 1989, 46 (1) p79-83, ISSN 0034-5288 Journal Code: 0401300
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

10567917

STIC-ILL

Mail only

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:39 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

Imp rtance: High

03844132 82256366 PMID: 7103889
Attenuation of a strain of Eimeria mivati of U.S. origin by serial embryo passage.
Long P L; Johnson J; Gore T C
Avian diseases (UNITED STATES) Apr-Jun 1982, 26 (2) p305-13, ISSN 0005-2086 Journal Code: 0370617
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

STIC-ILL

mc only

Fr m: Portner, Ginny
Sent: Thursday, May 15, 2003 11:38 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

4427277 84069417 PMID: 6646805
Studies to determine the taxonomic status of Eimeria mitis, Tyzzer 1929 and E. mivati, Edgar and Seibold 1964.
Shirley M W; Jeffers T K; Long P L
Parasitology (ENGLAND) Oct 1983, 87 (Pt 2) p185-98, ISSN 0031-1820 Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

Vol 10 5/15

STIC-ILL

4459889

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:43 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846

00241090 BIOSIS NO.: 000050056090
EIMERIA -STIEDAE CYTOCHEMICAL IDENTIFICATION OF ENZ ACID PHOSPHATASE AND ENZ ALKALINE PHOSPHATASES ENZ CARBOXYLIC ESTER HYDROLASES AND ENZ SUCCINATE DEHYDROGENASE ENZ LACTATE DEHYDROGENASE AND ENZ GLUCOSE-6 PHOSPHATE DEHYDROGENASE IN ENDOGENOUS STAGES FROM RABBIT TISSUES
AUTHOR: FRANDSEN J C
JOURNAL: EXP PARASITOL 23 (3). 398-411. 1968. 1968
FULL JOURNAL NAME: Experimental Parasitology
CODEN: EXPAA
RECORD TYPE: Citation

10569598

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

STIC-ILL

Vol 5/15

14/5987

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:42 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; reference for updated search

00547925 69079196 PMID: 5701763
Eimeria stiedae: cytochemical identification of acid and alkaline phosphatases, carboxylic ester hydrolases, and succinate, lactate, and glucose-6-phosphate dehydrogenases in endogenous stages from rabbit tissues.
Frandsen J C
Experimental parasitology (UNITED STATES) Dec 1968, 23 (3) p398-411, ISSN 0014-4894 Journal Code: 0370713
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal

1056 9497

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

VOL NO 5/15

STIC-ILL

4495988

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:41 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

Importance: High

01460771 73083928 PMID: 4346146
Enzymes of coccidia : purification and properties of L-lactate dehydrogenase from Eimeria stiedae.
Frandsen J C; Cooper J A
Experimental parasitology (UNITED STATES) Dec 1972, 32 (3) p390-402, ISSN 0014-4894 Journal Code: 0370713
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal

10569522

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

STIC-ILL

ND 5/15

#95973

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:36 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

Importance: High

07362256 92225423 PMID: 1808028
Enzyme variants of Eimeria parasitizing the domestic fowl and possibilities of species diagnostics.
Kucera J
Research Institute for Feed Supplements and Veterinary Drugs, Prague, Czechoslovakia.
Folia parasitologica (CZECHOSLOVAKIA) 1991, 38 (3) p193-9, ISSN 0015-5683 Journal Code: 0065750
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

5/16

COMPLETED

8

72

STIC-ILL

NO 5/15

445985

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:40 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

02903907 79078933 PMID: 726560
Electrophoretic variation of enzymes: a further marker for genetic studies of the Eimeria .
Shirley M W
Zeitschrift fur Parasitenkunde (Berlin, Germany) (GERMANY, WEST) Sep 4 1978, 57 (1) p83-7, ISSN 0044-3255 Journal Code: 8710749
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

10829916

STIC-ILL NO 5/15

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:42 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846

Importance: High

4/5/98

10929135 97281360 PMID: 9135668
Monoclonal antibodies against lactate dehydrogenase of Plasmodium knowlesi.
Kaushal D C; Kaushal N A; Chandra D
Division of Microbiology, Central Drug Research Institute, Lucknow, India.
Indian journal of experimental biology (INDIA) Jan 1995 , 33 (1) p6-11, ISSN 0019-5189 Journal Code: 0233411
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

10569479

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

STIC-ILL

Val no 5/15

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:40 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

4459854

02477294 77167679 PMID: 859094
Isoelectric focusing of coccidial enzymes.
Shirley M W; Lee D L
Journal of parasitology (UNITED STATES) Apr 1977, 63 (2) p390-2,
ISSN 0022-3395 Journal Code: 7803124
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal
Descriptors: Eimeria --enzymology--EN; Isoelectric Focusing; Isoenzymes; Lactate Dehydrogenase --isolation and purification--IP
CAS Registry No.: 0 (Isoenzymes)
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase)
Record Date Created: 19770630
Record Date Completed: 19770630

10569453

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

STIC-ILL 10568963 NO 5/15

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:43 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846

Importance: High

4445990

06736560 90362597 PMID: 2144028
Identification of Eimeria brunetti using glucose phosphate isomerase and lactate dehydrogenase.
Nakamura T; Kawaguchi H; Imose J
Aburahi Laboratories, Shionogi Research Laboratories, Shionogi & Co., Ltd., Shiga, Japan.
Nippon juigaku zasshi. The Japanese journal of veterinary science (JAPAN) Aug 1990, 52 (4) p859-60, ISSN 0021-5295 Journal Code: 0057113
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

BL - NO

```
save temp
Temp SearchSave "TD698" stored
?rf
Your last SELECT statement was:
   S EIMER?/TI (100N) (LACTATE? (2N) DEHYDROGENA?)

Ref        Items   File
---        -----   ----
N1             3     5: Biosis Previews(R)_1969-2003/May W2
N2             3   399: CA SEARCH(R)_1967-2003/UD=13820
N3             2    50: CAB Abstracts_1972-2003/Apr
N4             2   155: MEDLINE(R)_1966-2003/May W2
N5             2*  398: CHEMSEARCH(TM)_1957-2003/Apr
N6             2   440: Current Contents Search(R)_1990-2003/May 15
N7             1    10: AGRICOLA_70-2003/May
N8             1    34: SciSearch(R) Cited Ref Sci_1990-2003/May W1
N9             1    94: JICST-EPlus_1985-2003/May W1
N10            1   144: Pascal_1973-2003/May W1
   15 files have one or more items; file list includes 281 files.
   * One or more search terms are invalid in this file

        - Enter P or PAGE for more -
?b n4 n1:n3 N5:n15;exs
       15may03 10:10:04 User228206 Session D1971.4
            $6.36    3.180 DialUnits File411
     $6.36  Estimated cost File411
     $0.46  TELNET
     $6.82  Estimated cost this search
     $7.08  Estimated total session cost   3.261 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2003/May W2
         (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed.  Please see HELP NEWS 155.
  File   5:Biosis Previews(R)  1969-2003/May W2
         (c) 2003 BIOSIS
*File   5: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.
  File 399:CA SEARCH(R)  1967-2003/UD=13820
         (c) 2003 American Chemical Society
*File 399: Use is subject to the terms of your user/customer agreement.
Alert feature enhanced for multiple files, etc. See HELP ALERT.
  File  50:CAB Abstracts  1972-2003/Apr
         (c) 2003 CAB International
*File  50: Truncating CC codes is recommended for full retrieval.
See Help News50 for details.
  File 398:CHEMSEARCH(TM)  1957-2003/Apr
         (c) 2003 Amer.Chem.Soc.
*File 398: Use is subject to the terms of your user/customer agreement.
Problems with SORT.  RANK charge added. See HELP RATES 398.
  File 440:Current Contents Search(R)  1990-2003/May 15
         (c) 2003 Inst for Sci Info
*File 440: Daily alerts are now available.
  File  10:AGRICOLA  70-2003/May
         (c) format only 2003 The Dialog Corporation
  File  34:SciSearch(R) Cited Ref Sci  1990-2003/May W1
         (c) 2003 Inst for Sci Info
*File  34: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.
  File  94:JICST-EPlus  1985-2003/May W1
         (c)2003 Japan Science and Tech Corp(JST)
  File 144:Pascal  1973-2003/May W1
         (c) 2003 INIST/CNRS
  File 340:CLAIMS(R)/US Patent  1950-03/May 13
         (c) 2003 IFI/CLAIMS(R)
*File 340: The Claims U.S. Patent databases have been reloaded.
 HELP NEWS340 & HELP ALERTS340 for search, display & Alert info.
```

File 342:Derwent Patents Citation Indx 1978-01/200301
(c) 2003 Thomson Derwent
***File 342: Updates 200160-200209 replaced. See HELP NEWS 342.**
Alert feature enhanced for multiple files, etc. See HELP ALERT.
File 345:Inpadoc/Fam.& Legal Stat 1968-2003/UD=200318
(c) 2003 EPO
File 357:Derwent Biotech Res. _1982-2003/May W2
(c) 2003 Thomson Derwent & ISI
***File 357: File is now current. See HELP NEWS 357.**
Alert feature enhanced for multiple files, etc. See HELP ALERT.
File 654:US PAT.FULL. 1976-2003/May 13
(c) FORMAT ONLY 2003 THE DIALOG CORP.
***File 654: Reassignments current through Feb. 7, 2003**

Set	Items	Description

Executing TD698
>>>SET HILIGHT: use ON, OFF, or 1-5 characters
>>>Term "TI" is not defined in one or more files
31532 EIMER?/TI
321385 LACTATE?
650445 DEHYDROGENA?
S1 23 EIMER?/TI (100N) (LACTATE? (2N) DEHYDROGENA?)
?rd
>>>Duplicate detection is not supported for File 398.
>>>Duplicate detection is not supported for File 340.
>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 345.
>>>Duplicate detection is not supported for File 654.

>>>Records from unsupported files will be retained in the RD set.
>>>Record 440:2216761 ignored; incomplete bibliographic data, not retained in RD set
...completed examining records
S2 12 RD (unique items)
?t s2/3,kwic/all
>>>KWIC option is not available in file(s): 398, 399

2/3,KWIC/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

06736560 90362597 PMID: 2144028
Identification of Eimeria **brunetti using glucose phosphate isomerase and** lactate dehydrogenase .
Nakamura T; Kawaguchi H; Imose J
Aburahi Laboratories, Shionogi Research Laboratories, Shionogi & Co., Ltd., Shiga, Japan.
Nippon juigaku zasshi. The Japanese journal of veterinary science (JAPAN) Aug 1990, 52 (4) p859-60, ISSN 0021-5295 Journal Code: 0057113
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Identification of Eimeria **brunetti using glucose phosphate isomerase and** lactate dehydrogenase .

2/3,KWIC/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

01460771 73083928 PMID: 4346146
Enzymes of coccidia: purification and properties of L- lactate dehydrogenase **from** Eimeria **stiedae.**
Frandsen J C; Cooper J A
Experimental parasitology (UNITED STATES) Dec 1972, 32 (3) p390-402, ISSN 0014-4894 Journal Code: 0370713

Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Enzymes of coccidia: purification and properties of L- lactate dehydrogenase **from** Eimeria **stiedae.**

2/3,KWIC/3 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

01204544 BIOSIS NO.: 000056014746
ENZYMES OF COCCIDIA PURIFICATION AND PROPERTIES OF L LACTATE DEHYDROGENASE **EC-1.1.1.27 FROM** EIMERIA **-STIEDAE**
AUTHOR: FRANDSEN J C; COOPER J A
JOURNAL: EXP PARASITOL 32 (3). 1972 (RECD 1973) 390-402. 1972
FULL JOURNAL NAME: Experimental Parasitology
CODEN: EXPAA
RECORD TYPE: Citation

ENZYMES OF COCCIDIA PURIFICATION AND PROPERTIES OF L LACTATE DEHYDROGENASE **EC-1.1.1.27 FROM** EIMERIA **-STIEDAE**

2/3,KWIC/4 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

00241090 BIOSIS NO.: 000050056090
EIMERIA **-STIEDAE CYTOCHEMICAL IDENTIFICATION OF ENZ ACID PHOSPHATASE AND ENZ ALKALINE PHOSPHATASES ENZ CARBOXYLIC ESTER HYDROLASES AND ENZ SUCCINATE** DEHYDROGENASE **ENZ** LACTATE DEHYDROGENASE **AND ENZ GLUCOSE-6 PHOSPHATE DEHYDROGENASE IN ENDOGENOUS STAGES FROM RABBIT TISSUES**
AUTHOR: FRANDSEN J C
JOURNAL: EXP PARASITOL 23 (3). 398-411. 1968. 1968
FULL JOURNAL NAME: Experimental Parasitology
CODEN: EXPAA
RECORD TYPE: Citation

EIMERIA **-STIEDAE CYTOCHEMICAL IDENTIFICATION OF ENZ ACID PHOSPHATASE AND ENZ ALKALINE PHOSPHATASES ENZ CARBOXYLIC ESTER HYDROLASES AND ENZ SUCCINATE** DEHYDROGENASE **ENZ** LACTATE DEHYDROGENASE **AND ENZ GLUCOSE-6 PHOSPHATE DEHYDROGENASE IN ENDOGENOUS STAGES FROM RABBIT TISSUES**

2/3,KWIC/5 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

126263156 CA: 126(20)263156h PATENT
Eimeria lactate dehydrogenase cDNA sequence and vector and vaccine for protecting poultry against coccidiosis
INVENTOR(AUTHOR): Kok, Jacobus Johannes; van den Boogaart, Paul; Vermeulen, Arnoldus Nicolaas
LOCATION: Neth.
ASSIGNEE: Akzo Nobel N.V.
PATENT: Canada Pat Appl ; CA 2180309 AA DATE: 19970104
APPLICATION: CA 2180309 (19960702) *EP 95201801 (19950703)
PAGES: 50 pp. CODEN: CPXXEB LANGUAGE: English CLASS: C12N-015/53A; C12N-009/04B; C07K-016/40B; A61K-039/012B

2/3,KWIC/6 (Item 1 from file: 398)
DIALOG(R)File 398:CHEMSEARCH(TM)

CAS REGISTRY NUMBER: 188856-68-0

MOLECULAR FORMULA: Unknown
CA NAME(S):
HP=Dehydrogenase, lactate (Eimeria acervulina strain Houghton) (9CI)

2/3,KWIC/7 (Item 2 from file: 398)
DIALOG(R)File 398:CHEMSEARCH(TM)

CAS REGISTRY NUMBER: 187043-46-5
MOLECULAR FORMULA: Unknown
REPLACED CAS REGISTRY NUMBER(S) : 188856-67-9
CA NAME(S):
HP=DNA (swine clone pWSPH.01 cytidine monophosphoacetylneuraminate monooxygenase cDNA plus flanks) (9CI)
HP=DNA (pig clone pWSPH.01 cytidine monophosphoacetylneuraminate monooxygenase cDNA plus flanks)
SYNONYMS: Deoxyribonucleic acid (pig clone pWSPH.01 cytidine monophosphoacetylneuraminate monooxygenase cDNA plus flanks); DNA (Eimeria acervulina strain Houghton lactate dehydrogenase cDNA plus flanks)

2/3,KWIC/8 (Item 1 from file: 340)
DIALOG(R)File 340:CLAIMS(R)/US Patent

3365083 0024872
C/COCCIDIOSIS POULTRY VACCINE; NUCLEIC ACIDS ENCODING AN IMMUNOGENIC FRAGMENT OF EIMERIA LACTATE DEHYDROGENASE **(LDH) WHICH WILL REACT WITH ANTISERUM RAISED AGAINST THE LDH; PREPARING A VECTOR VACCINE AGAINST COCCIDIOSIS; ADMINISTERING TO PREVENT COCCIDIOSIS IN BIRDS**
Inventors: van den Boogaart Paul (NL); Kok Jacobus Johannes (NL); Vermeulen Arnodus Nicolaas (NL)
Assignee: Akzo Nobel N V NL
Assignee Code: 33913

	Kind	Publication Number	Date	Application Number	Date
	A	US 6100241	20000808	US 96676882	19960703
Priority Applic:				EP 95201801	19950703

Calculated Expiration: 20160703

...NUCLEIC ACIDS ENCODING AN IMMUNOGENIC FRAGMENT OF EIMERIA LACTATE DEHYDROGENASE **(LDH) WHICH WILL REACT WITH ANTISERUM RAISED AGAINST THE LDH; PREPARING A VECTOR VACCINE AGAINST...**

2/3,KWIC/9 (Item 1 from file: 342)
DIALOG(R)File 342:Derwent Patents Citation Indx

02926615 WPI Acc No: 97-109375/11
Eimeria lactate dehydrogenase protein - used for prodn. of vaccines against coccidiosis in poultry
Patent Assignee: (ALKU) AKZO NOBEL NV
Author (Inventor): KOK J J; VAN DEN BOOGAART P; VERMEULEN A N
Patent (basic)

Patent No	Kind	Date	Examiner Field of Search
AU 9656287	A	970116 (BASIC)	

Derwent Week (Basic): 9711
Priority Data: EP 95201801 (950703)
Applications: EP 96201818 (960701); NZ 286915 (960701); ZA 965586 (960701); AU 9656287 (960702); CA 2180309 (960702); HU 961809 (960702); JP 96173890 (960703); US 676882 (960703)
Designated States
(Regional): AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC;

NL; PT; SE
Derwent Class: B04; C06; D16
Int Pat Class: A01N-043/04; A61K-031/70; A61K-039/012; C07K-014/435; C07K-014/455; C07K-016/20; C07K-016/40; C12N-005/10; C12N-009/04; C12N-015/09; C12N-015/30; C12N-015/53; C12N-015/63; C12P-021/02
Number of Patents: 010
Number of Countries: 025
Number of Cited Patents: 017
Number of Cited Literature References: 015
Number of Citing Patents: 000

2/3,KWIC/10 (Item 1 from file: 345)
DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat

13451402
Basic Patent (No,Kind,Date): CA 2180309 AA 19970104 <No. of Patents: 010>
COCCIDIOSIS POULTRY VACCINE (English; French)
Patent Assignee: AKZO NOBEL NV (NL)
Author (Inventor): KOK JACOBUS JOHANNES (NL); VAN DEN BOOGAART PAUL (NL); VERMEULEN ARNOLDUS NICOLAAS (NL)
IPC: *C12N-015/53; C12N-009/04; C07K-016/40; A61K-039/012
CA Abstract No: 126(20)263156H
Language of Document: English
Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date	
AU 9656287	A1	19970116	AU 9656287	A	19960702	
AU 707350	B2	19990708	AU 9656287	A	19960702	
CA 2180309	AA	19970104	CA 2180309	A	19960702	(BASIC)
EP 775746	A2	19970528	EP 96201818	A	19960701	
EP 775746	A3	19970611	EP 96201818	A	19960701	
HU 9601809	AB	19970528	HU 969601809	A	19960702	
JP 9048797	A2	19970218	JP 96173890	A	19960703	
NZ 286915	A	19980325	NZ 286915	A	19960701	
US 6100241	A	20000808	US 676882	A	19960703	
ZA 9605586	A	19970131	ZA 965586	A	19960701	

Priority Data (No,Kind,Date):
EP 95201801 A 19950703

Dialog File: Inpadoc/Fam.& Legal Stat_1968-2003/UD=200318

2/3,KWIC/11 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.

0208588 DBR Accession No.: 97-03709 PATENT
Eimeria lactate - dehydrogenase **protein and DNA - gene cloning and vector expression in host cell or organism for fowl recombinant vaccine construction against coccidiosis**
AUTHOR: Kok J J; van den Boogaart P; Vermeulen A N
CORPORATE SOURCE: Arnhem, The Netherlands.
PATENT ASSIGNEE: Akzo-Nobel 1997
PATENT NUMBER: AU 9656287 PATENT DATE: 970116 WPI ACCESSION NO.: 97-109375 (9711)
PRIORITY APPLIC. NO.: EP 95201801 APPLIC. DATE: 950703
NATIONAL APPLIC. NO.: AU 9656287 APPLIC. DATE: 960702
LANGUAGE: English

Eimeria lactate - dehydrogenase **protein and DNA**

2/3,KWIC/12 (Item 1 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

4362359
Derwent Accession: 1997-109375

Utility
C/ **Coccidiosis poultry vaccine; NUCLEIC ACIDS ENCODING AN IMMUNOGENIC FRAGMENT OF** EIMERIA LACTATE DEHYDROGENASE **(LDH) WHICH WILL REACT WITH ANTISERUM RAISED AGAINST THE LDH; PREPARING A VECTOR VACCINE AGAINST COCCIDIOSIS; ADMINISTERING TO PREVENT COCCIDIOSIS IN BIRDS**

Inventor: Kok, Jacobus Johannes, Nijmegen, NL
van den Boogaart, Paul, SC Oss, NL
Vermeulen, Arnodus Nicolaas, Cuyk, NL
Assignee: Akzo Nobel, N.V. (03), NL
Akzo Nobel N V NL (Code: 33913)
Examiner: Crouch, Deborah (Art Unit: 162)
Assistant Examiner: Martin, Jill D.
Combined Principal Attorneys: Gormley, Mary E.

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 6100241	A	20000808	US 96676882	19960703
Priority				EP 95201801	19950703

Fulltext Word Count: 9585...

0929135 97281360 PMID: 9135668

Monoclonal antibodies against lactate dehydrogenase of Plasmodium knowlesi.

Kaushal D C; Kaushal N A; Chandra D

Division of Microbiology, Central Drug Research Institute, Lucknow, India.

Indian journal of experimental biology (INDIA) Jan **1995** , 33 (1) p6-11, ISSN 0019-5189 Journal Code: 0233411

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Lactate dehydrogenase (LDH) of malarial **parasites** has been demonstrated to be biochemically and immunochemically distinct from the equivalent host enzyme. The polyclonal antibodies raised against the purified plasmodial LDH showed specificity to Plasmodium spp. Six hybridoma cell lines secreting monoclonal antibodies specific to Plasmodium knowlesi LDH have been obtained. The two monoclonal antibodies (2A3B7 and 4A6A7) showed high reactivity with LDH from simian (P. knowlesi. P. cynomolgi), human (P. falciparum, P. vivax) and rodent (P. berghei, P. yoelii) malarial **parasites** and did not cross-react with red cell LDH as well as with isoenzymic forms of mammalian LDH (A4, B4 and C4). One monoclonal antibody (4A6A7) strongly inhibited the enzyme activity specifically of plasmodial LDH and did not have any effect on the activity of red cell LDH. The other monoclonal (2A3B7) did not show inhibitory effect on **parasite** LDH. These findings as well as competitive immunoassay studies suggest the presence of at least two **parasite** specific epitopes on plasmodial LDH.

Tags: Animal; Human; Support, Non-U.S. Gov't

Descriptors: Antibodies, Monoclonal; * **Lactate Dehydrogenase** --immunology --IM; *Plasmodium knowlesi--immunology--IM; Antibody Specificity; Enzyme-Linked Immunosorbent Assay

CAS Registry No.: 0 (Antibodies, Monoclonal)

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase)

Record Date Created: 19970604

NiceProt View of TrEMBL: Q8I8U3

Printer-friendly view | Quick BlastP search

[General] [Name and origin] [References] [Comments] [Cross-references] [Keywords] [Features] [Sequence] [Tools]

Note: most headings are clickable, even if they don't appear as links. They link to the user manual or other documents.

General information about the entry	
Entry name	**Q8I8U3**
Primary accession number	**Q8I8U3**
Secondary accession numbers	None
Entered in TrEMBL in	Release 23, March 2003
Sequence was last modified in	Release 23, March 2003
Annotations were last modified in	Release 24, June 2003
Name and origin of the protein	
Protein name	**Lactate dehydrogenase**
Synonyms	None
Gene name	**LDH**
From	Eimeria maxima [TaxID: 5804]
Taxonomy	Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida; Eimeriidae; Eimeria.
References	

[1]	SEQUENCE FROM NUCLEIC ACID. Schaap D.C.; "Characterization and cloning of lactate dehydrogenase from three Eimeria species."; Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
[2]	SEQUENCE FROM NUCLEIC ACID. Niessen R., Schaap D.C.; Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.

Comments

None

Cross-references

EMBL	AY143390; AAN38977.1; -.	[EMBL / GenBank / DDBJ] [CoDingSequence]
InterPro	IPR001236; ldh. IPR001557; L_LDH. Graphical view of domain structure.	
Pfam	PF00056; ldh; 1. PF02866; ldh_C; 1.	
PRINTS	PR00086; LLDHDRGNASE.	
ProDom	[Domain structure / List of seq. sharing at least 1 domain].	
ProtoMap	Q8I8U3.	
PRESAGE	Q8I8U3.	
ModBase	Q8I8U3.	
SWISS-2DPAGE	Get region on 2D PAGE.	

Keywords

None

Features

None

Sequence information

Length: **330 AA**	Molecular weight: **35951 Da**	CRC64: **380CB5B7151B59E8** [This is a checksum on the sequence]

```
        10         20         30         40         50         60
         |          |          |          |          |          |
MAVFEKVRRP KIALVGSGMI GGTMGFLCSL RELGDVVLFD VVPNMPAGKA LDLCHTAAVA

        70         80         90        100        110        120
         |          |          |          |          |          |
DNGVRVQGAN SYASLEGADV VIITAGITKA AGKSDQEWSR KDLLPVNVKI LREVGAAIKQ

       130        140        150        160        170        180
         |          |          |          |          |          |
FCPHAFVINI TNPLDVMVAA LREAAGLPAA RVCGMAGVLD SARFRRLLAD RLGVSPRDVQ

       190        200        210        220        230        240
         |          |          |          |          |          |
AMVLGVHGDN MVPLSRFATV NGVPLGELAR QGWISEAEIR EVERQTRAAG GDIVRLLGQG

       250        260        270        280        290        300
         |          |          |          |          |          |
SAYFAPGAAA VAMAEAYLKD QKRVFVCSCY LEGPYGVRGH CLGVPCVVGA GGVERVIELP

       310        320        330
         |          |          |
LDAREAQLLQ ASIDEVREMH RQLAAADAAA E
```

Q8I8U4 in FASTA format

View entry in original TrEMBL format
View entry in raw text format (no links)
Request for annotation of this TrEMBL entry

BLAST BLAST submission on ExPASy/SIB or at NCBI (USA)

Sequence analysis tools: ProtParam, ProtScale, Compute pI/Mw, PeptideMass, PeptideCutter, Dotlet (Java)

ScanProsite, MotifScan

Search the SWISS-MODEL Repository

ExPASy Home page | Site Map | Search ExPASy | Contact us | Swiss-Prot

Hosted by NCSC US | Mirror sites: Canada China Korea Switzerland Taiwan

NiceProt View of TrEMBL: Q8I8U4

Printer-friendly view | Quick BlastP search

[General] [Name and origin] [References] [Comments] [Cross-references] [Keywords] [Features] [Sequence] [Tools]

Note: most headings are clickable, even if they don't appear as links. They link to the user manual or other documents.

General information about the entry	
Entry name	**Q8I8U4**
Primary accession number	**Q8I8U4**
Secondary accession numbers	None
Entered in TrEMBL in	Release 23, March 2003
Sequence was last modified in	Release 23, March 2003
Annotations were last modified in	Release 24, June 2003
Name and origin of the protein	
Protein name	**Lactate dehydrogenase**
Synonyms	None
Gene name	**LDH**
From	Eimeria tenella [TaxID: 5802]
Taxonomy	Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida; Eimeriidae; Eimeria.
References	

[1]	SEQUENCE FROM NUCLEIC ACID. Schaap D.C.; "Characterization and cloning of lactate dehydrogenase from three Eimeria species."; Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
[2]	SEQUENCE FROM NUCLEIC ACID. Arts G., Kroezen H., Schaap D.C.; Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.

Comments

None

Cross-references

EMBL	AY143389; AAN38976.1; -.	[EMBL / GenBank / DDBJ] [CoDingSequence]
InterPro	IPR001236; Idh. IPR001557; L_LDH. Graphical view of domain structure.	
Pfam	PF00056; Idh; 1. PF02866; Idh_C; 1.	
PRINTS	PR00086; LLDHDRGNASE.	
ProDom	[Domain structure / List of seq. sharing at least 1 domain].	
ProtoMap	Q8I8U4.	
PRESAGE	Q8I8U4.	
ModBase	Q8I8U4.	
SWISS-2DPAGE	Get region on 2D PAGE.	

Keywords

None

Features

None

Sequence information

Length: **331 AA**	Molecular weight: **34965 Da**	CRC64: **BEF87B9F837AE469** [This is a checksum on the sequence]

```
        10         20         30         40         50         60
         |          |          |          |          |          |
MAVFEQNKRP KIALVGSGMI GGTMAFLCSL KELGDVVLFD VVPNMPMGKA MDLCHNSSVV

        70         80         90        100        110        120
         |          |          |          |          |          |
DNGITVYGSN SYECLTNADV VIITAGITKI PGKSDKEWSR MDLLPVNIKI MREVGGAIKK

       130        140        150        160        170        180
         |          |          |          |          |          |
YCPNAFIINI TNPLDVMVAA VQEAANVPKH MICGMAGMLD SSRLRRMIAD CLHVSPHDVQ

       190        200        210        220        230        240
         |          |          |          |          |          |
GMVIGVHGDN MLPLMRYITI NGIPIQEFIN KGLINKEEIN NIYNKTKQAG GDIVRLLGQG

       250        260        270        280        290        300
         |          |          |          |          |          |
SAYYAPGTSA ILMAESYLKD KKRLFVSSCY LNGQYNVNNH YLGVPCIIGG KGIEQIIELD

       310        320        330
         |          |          |
LNQEEKKLLQ GSIDEVLEMQ KAIAALDAGK
```

Q8I8U3 in FASTA format

View entry in original TrEMBL format
View entry in raw text format (no links)
Request for annotation of this TrEMBL entry

BLAST — BLAST submission on ExPASy/SIB or at NCBI (USA)

Sequence analysis tools: ProtParam, ProtScale, Compute pI/Mw, PeptideMass, PeptideCutter, Dotlet (Java)

ScanProsite, MotifScan

Search the SWISS-MODEL Repository

```
ID   AY143388   standard; RNA; INV; 1567 BP.
XX
AC   AY143388;
XX
SV   AY143388.1
XX
DT   04-DEC-2002 (Rel. 74, Created)
DT   04-DEC-2002 (Rel. 74, Last updated, Version 1)
XX
DE   Eimeria acervulina lactate dehydrogenase (LDH) mRNA, complete cds.
XX
KW   .
XX
OS   Eimeria acervulina
OC   Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida; Eimeriidae;
OC   Eimeria.
XX
RN   [1]
RP   1-1567
RA   Schaap D.C.;
RT   "Characterization and cloning of lactate dehydrogenase from three Eimeria
RT   species";
RL   Unpublished.
XX
RN   [2]
RP   1-1567
RA   Kok H.J., van den Boogaart P., Vermeulen A.N., Schaap D.C.;
RT   ;
RL   Submitted (20-AUG-2002) to the EMBL/GenBank/DDBJ databases.
RL   Parasitology R&D, Intervet, Wim de Korverstraat, Boxmeer 5830AA, The
RL   Netherlands
XX
FH   Key             Location/Qualifiers
FH
FT   source          1..1567
FT                   /db_xref="taxon:5801"
FT                   /organism="Eimeria acervulina"
FT   CDS             227..1219
FT                   /codon_start=1
FT                   /gene="LDH"
FT                   /product="lactate dehydrogenase"
FT                   /protein_id="AAN38975.1"
FT                   /translation="MAVFEKNTRPKIAMVGSGMIGGTMAFLCSLRELGDVVLFDVVPNM
FT                   PMGKAMDISHNSSVVDTGITVYGSNSYECLKGADVVIITAGITKIPGKSDKEWSRMDLL
FT                   PVNIKIMREVGAAIKSYCPNAFVINITNPLDVMVAALQESSGLPHHRICGMAGMLDSSR
FT                   FRRMIADKLEVSPRDVQGMVIGVHGDHMVPLSRYATVNGIPLSEFVKKGWIKQEEVDDI
FT                   VQKTKVAGGEIVRLLGQGSAYYAPGASAIQMAESYLKDRKRVMVCSCYLQGQYGVQNHY
FT                   LGVPCVIGGRGVEKIIELELTAQERQELQGSIDEVKEMQKAIAALDASK"
XX
SQ   Sequence 1567 BP; 428 A; 318 C; 372 G; 449 T; 0 other;
     ttttttttt ttttctaca cattaatatt cttcgtttac gtttattttg ctacaaataa        60
     acccctaaa ctctctattt cctcatattc taccgcttca tcggtgggtg tgtaagacgt       120
     acgtacgtac agctggggct ggcttactgc gcaccgctta tttattactt aattcataca       180
     cattttatat ctttcttctt ctttttttct gctctttctt gtgaaaatgg cggtcttcga       240
     gaagaataca cgccccaaga ttgctatggt gggctccggt atgattggag gcaccatggc       300
     tttcctgtgc agcttgaggg aactcggaga tgttgtcctc ttcgacgttg taccgaacat       360
     gccgatgggg aaggcgatgg atatatcgca caattcgtcg gtggttgaca cgggtataac       420
     agtatacggc tcaaattcat acgagtgctt gaagggtgcg gacgtagtaa taataacagc       480
     agggataaca aagatacccg gaaagagcga taaagaatgg tctagaatgg atctattacc       540
     tgtgaatata aagataatga gggaggtcgg tgcagcaatt aaatcttact gtcctaatgc       600
     atttgttatt aatataacaa atcctttaga tgtgatggta gctgctcttc aagagtcatc       660
     aggactacct catcatagaa tctgcggtat ggctgggatg cttgatagct ctcgttttag       720
     acgtatgata gctgataaat tagaagtctc tcctagagat gtacagggga tggtcatagg       780
     tgtacacggc gatcatatgg tgcccctaag tagatatgca acagttaacg gcatcccgct       840
     ttctgagttt gttaagaagg gctggatcaa gcaagaagaa gtagatgata tcgttcagaa       900
```

```
     gaccaaggtc gctggaggag agatcgtacg cctattagga caaggctctg cttactatgc       960
     tccaggggct tcagctattc agatggctga gagctatcta aaggatagaa agagagtgat      1020
     ggtttgctct tgctacttgc aaggacaata tggtgtacag aatcactact taggagtacc      1080
     ttgtgttatc ggtgggagag gtgttgagaa gattattgag ttagaattga ccgcacaaga      1140
     aagacaggag cttcagggat ctatcgatga ggttaaggag atgcagaagg ctattgctgc      1200
     tcttgatgca tccaagtaag cagcagcaaa atcgcagaag ttgcagcgct agaacaacca      1260
     gcagcagcag cagcagcagc ctatagttct tgctgctgct gttcctacta cagctgcggc      1320
     tttcttcctc gtgttattat catgatagta agctgctgta ccagcagcag cagcagcagc      1380
     agattttgct tgcaccgccg tttgttttgc gtacaccggc agaaatattg acttgcagtt      1440
     aggagaaaga aagaaaacaa acacgatccc atcgatccca ataaacccca cactgtcgat      1500
     cccatcgatc ccagcaactc cacggggctc ttaactgtta aacctattat tcttatcatt      1560
     actgtct                                                               1567
//
```

```
File 155:MEDLINE(R)  1966-2003/May W2
       (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed.  Please see HELP NEWS 155.

      Set  Items  Description
      ---  -----  -----------
?e lactate dehydrogenase

Ref    Items    RT  Index-term
E1        74        LACTATE //SODIUM (SODIUM LACTATE)
E2        16        LACTATE DEHYDRATASE
E3     27809     4 *LACTATE DEHYDROGENASE
E4         9        LACTATE DEHYDROGENASE --ADMINISTRATION AND DOS
E5         4        LACTATE DEHYDROGENASE --ADVERSE EFFECTS --AE
E6      4463        LACTATE DEHYDROGENASE --ANALYSIS --AN
E7       606        LACTATE DEHYDROGENASE --ANTAGONISTS AND INHIBI
E8       310        LACTATE DEHYDROGENASE --BIOSYNTHESIS --BI
E9      8278        LACTATE DEHYDROGENASE --BLOOD --BL
E10      275        LACTATE DEHYDROGENASE --CEREBROSPINAL FLUID --
E11        4        LACTATE DEHYDROGENASE --CHEMICAL SYNTHESIS --C
E12      382        LACTATE DEHYDROGENASE --CHEMISTRY --CH

          Enter P or PAGE for more
?p

Ref    Items  Index-term
E13       23  LACTATE DEHYDROGENASE --CLASSIFICATION --CL
E14      107  LACTATE DEHYDROGENASE --DEFICIENCY --DF
E15       56  LACTATE DEHYDROGENASE --DIAGNOSTIC USE --DU
E16      269  LACTATE DEHYDROGENASE --DRUG EFFECTS --DE
E17      759  LACTATE DEHYDROGENASE --GENETICS --GE
E18      223  LACTATE DEHYDROGENASE --IMMUNOLOGY --IM
E19      619  LACTATE DEHYDROGENASE --ISOLATION AND PURIFICA
E20    11602  LACTATE DEHYDROGENASE --METABOLISM --ME
E21       14  LACTATE DEHYDROGENASE --PHARMACOKINETICS --PK
E22       52  LACTATE DEHYDROGENASE --PHARMACOLOGY --PD
E23       66  LACTATE DEHYDROGENASE --PHYSIOLOGY --PH
E24      101  LACTATE DEHYDROGENASE --RADIATION EFFECTS --RE

          Enter P or PAGE for more
?p

Ref    Items  Index-term
E25      612  LACTATE DEHYDROGENASE --SECRETION --SE
E26       11  LACTATE DEHYDROGENASE --STANDARDS --ST
E27        5  LACTATE DEHYDROGENASE --THERAPEUTIC USE --TU
E28        2  LACTATE DEHYDROGENASE --TOXICITY --TO
E29       11  LACTATE DEHYDROGENASE --ULTRASTRUCTURE --UL
E30      406  LACTATE DEHYDROGENASE --URINE --UR
E31       14  LACTATE DEHYDROGENASE C4
E32       16  LACTATE DEHYDROGENASE 1
E33        2  LACTATE DEHYDROGENASE 2
E34        1  LACTATE DEHYDROGENASE 3
E35        2  LACTATE DEHYDROGENASE 4
E36       26  LACTATE DEHYDROGENASE 5

          Enter P or PAGE for more
?p

Ref    Items    RT  Index-term
E37      260     4  LACTATE DEHYDROGENASE-ELEVATING VIRUS
E38        1        LACTATE DEHYDROGENASE-ELEVATING VIRUS --ANALYS
E39        7        LACTATE DEHYDROGENASE-ELEVATING VIRUS --CHEMIS
E40        9        LACTATE DEHYDROGENASE-ELEVATING VIRUS --CLASSI
E41        8        LACTATE DEHYDROGENASE-ELEVATING VIRUS --DRUG E
E42        1        LACTATE DEHYDROGENASE-ELEVATING VIRUS --ENZYMO
E43       36        LACTATE DEHYDROGENASE-ELEVATING VIRUS --GENETI
E44       19        LACTATE DEHYDROGENASE-ELEVATING VIRUS --GROWTH
```

```
E45     108        LACTATE DEHYDROGENASE-ELEVATING VIRUS --IMMUNO
E46      23        LACTATE DEHYDROGENASE-ELEVATING VIRUS --ISOLAT
E47      11        LACTATE DEHYDROGENASE-ELEVATING VIRUS --METABO
E48      31        LACTATE DEHYDROGENASE-ELEVATING VIRUS --PATHOG

          Enter P or PAGE for more
?s e3-e36
           27809  LACTATE DEHYDROGENASE
               9  LACTATE DEHYDROGENASE --ADMINISTRATION AND DOS
               4  LACTATE DEHYDROGENASE --ADVERSE EFFECTS --AE
            4463  LACTATE DEHYDROGENASE --ANALYSIS --AN
             606  LACTATE DEHYDROGENASE --ANTAGONISTS AND INHIBI
             310  LACTATE DEHYDROGENASE --BIOSYNTHESIS --BI
            8278  LACTATE DEHYDROGENASE --BLOOD --BL
             275  LACTATE DEHYDROGENASE --CEREBROSPINAL FLUID --
               4  LACTATE DEHYDROGENASE --CHEMICAL SYNTHESIS --C
             382  LACTATE DEHYDROGENASE --CHEMISTRY --CH
              23  LACTATE DEHYDROGENASE --CLASSIFICATION --CL
             107  LACTATE DEHYDROGENASE --DEFICIENCY --DF
              56  LACTATE DEHYDROGENASE --DIAGNOSTIC USE --DU
             269  LACTATE DEHYDROGENASE --DRUG EFFECTS --DE
             759  LACTATE DEHYDROGENASE --GENETICS --GE
             223  LACTATE DEHYDROGENASE --IMMUNOLOGY --IM
             619  LACTATE DEHYDROGENASE --ISOLATION AND PURIFICA
           11602  LACTATE DEHYDROGENASE --METABOLISM --ME
              14  LACTATE DEHYDROGENASE --PHARMACOKINETICS --PK
              52  LACTATE DEHYDROGENASE --PHARMACOLOGY --PD
              66  LACTATE DEHYDROGENASE --PHYSIOLOGY --PH
             101  LACTATE DEHYDROGENASE --RADIATION EFFECTS --RE
             612  LACTATE DEHYDROGENASE --SECRETION --SE
              11  LACTATE DEHYDROGENASE --STANDARDS --ST
               5  LACTATE DEHYDROGENASE --THERAPEUTIC USE --TU
               2  LACTATE DEHYDROGENASE --TOXICITY --TO
              11  LACTATE DEHYDROGENASE --ULTRASTRUCTURE --UL
             406  LACTATE DEHYDROGENASE --URINE --UR
              14  LACTATE DEHYDROGENASE C4
              16  LACTATE DEHYDROGENASE 1
               2  LACTATE DEHYDROGENASE 2
               1  LACTATE DEHYDROGENASE 3
               2  LACTATE DEHYDROGENASE 4
              26  LACTATE DEHYDROGENASE 5
      S1   27809  E3-E36
?e e3

Ref    Items Type  RT  Index-term
R1     27809        4 *LACTATE DEHYDROGENASE
R2     27809   X       DC=D8.586.682.47.547. (LACTATE DEHYDROGENASE)
R3         0   X    1  LACTIC CYTOCHROME REDUCTASE
R4      9067   B   40  ALCOHOL OXIDOREDUCTASES
R5         0   N    5  EPSILON-CRYSTALLINS
?s r1 or r2
           27809  LACTATE DEHYDROGENASE
           27809  DC=D8.586.682.47.547.  (LACTATE DEHYDROGENASE)
      S2   27809  'LACTATE DEHYDROGENASE' OR DC='D8.586.682.47.547.'
?e r5

Ref    Items Type  RT  Index-term
R1         0        5 *EPSILON-CRYSTALLINS
R2         0   X       DC=D12.776.306.366.350. (EPSILON-CRYSTALLINS)
R3         0   X       DC=D8.586.682.47.547.500. (EPSILON-CRYSTALLINS)
R4         0   X    1  CRYSTALLINS, EPSILON
R5      4396   B   15  CRYSTALLINS
R6     27809   B    4  LACTATE DEHYDROGENASE
?s r6
      S3   27809  'LACTATE DEHYDROGENASE'
?e lactate dehydrogenase

Ref    Items   RT  Index-term
E1        74       LACTATE //SODIUM (SODIUM LACTATE)
```

```
E2       16       LACTATE DEHYDRATASE
E3    27809     4 *LACTATE DEHYDROGENASE
E4        9       LACTATE DEHYDROGENASE --ADMINISTRATION AND DOS
E5        4       LACTATE DEHYDROGENASE --ADVERSE EFFECTS --AE
E6     4463       LACTATE DEHYDROGENASE --ANALYSIS --AN
E7      606       LACTATE DEHYDROGENASE --ANTAGONISTS AND INHIBI
E8      310       LACTATE DEHYDROGENASE --BIOSYNTHESIS --BI
E9     8278       LACTATE DEHYDROGENASE --BLOOD --BL
E10     275       LACTATE DEHYDROGENASE --CEREBROSPINAL FLUID --
E11       4       LACTATE DEHYDROGENASE --CHEMICAL SYNTHESIS --C
E12     382       LACTATE DEHYDROGENASE --CHEMISTRY --CH

         Enter P or PAGE for more
?p

Ref    Items  Index-term
E13       23  LACTATE DEHYDROGENASE --CLASSIFICATION --CL
E14      107  LACTATE DEHYDROGENASE --DEFICIENCY --DF
E15       56  LACTATE DEHYDROGENASE --DIAGNOSTIC USE --DU
E16      269  LACTATE DEHYDROGENASE --DRUG EFFECTS --DE
E17      759  LACTATE DEHYDROGENASE --GENETICS --GE
E18      223  LACTATE DEHYDROGENASE --IMMUNOLOGY --IM
E19      619  LACTATE DEHYDROGENASE --ISOLATION AND PURIFICA
E20    11602  LACTATE DEHYDROGENASE --METABOLISM --ME
E21       14  LACTATE DEHYDROGENASE --PHARMACOKINETICS --PK
E22       52  LACTATE DEHYDROGENASE --PHARMACOLOGY --PD
E23       66  LACTATE DEHYDROGENASE --PHYSIOLOGY --PH
E24      101  LACTATE DEHYDROGENASE --RADIATION EFFECTS --RE

         Enter P or PAGE for more
?p

Ref    Items  Index-term
E25      612  LACTATE DEHYDROGENASE --SECRETION --SE
E26       11  LACTATE DEHYDROGENASE --STANDARDS --ST
E27        5  LACTATE DEHYDROGENASE --THERAPEUTIC USE --TU
E28        2  LACTATE DEHYDROGENASE --TOXICITY --TO
E29       11  LACTATE DEHYDROGENASE --ULTRASTRUCTURE --UL
E30      406  LACTATE DEHYDROGENASE --URINE --UR
E31       14  LACTATE DEHYDROGENASE C4
E32       16  LACTATE DEHYDROGENASE 1
E33        2  LACTATE DEHYDROGENASE 2
E34        1  LACTATE DEHYDROGENASE 3
E35        2  LACTATE DEHYDROGENASE 4
E36       26  LACTATE DEHYDROGENASE 5

         Enter P or PAGE for more
?p

Ref    Items   RT  Index-term
E37      260    4  LACTATE DEHYDROGENASE-ELEVATING VIRUS
E38        1       LACTATE DEHYDROGENASE-ELEVATING VIRUS --ANALYS
E39        7       LACTATE DEHYDROGENASE-ELEVATING VIRUS --CHEMIS
E40        9       LACTATE DEHYDROGENASE-ELEVATING VIRUS --CLASSI
E41        8       LACTATE DEHYDROGENASE-ELEVATING VIRUS --DRUG E
E42        1       LACTATE DEHYDROGENASE-ELEVATING VIRUS --ENZYMO
E43       36       LACTATE DEHYDROGENASE-ELEVATING VIRUS --GENETI
E44       19       LACTATE DEHYDROGENASE-ELEVATING VIRUS --GROWTH
E45      108       LACTATE DEHYDROGENASE-ELEVATING VIRUS --IMMUNO
E46       23       LACTATE DEHYDROGENASE-ELEVATING VIRUS --ISOLAT
E47       11       LACTATE DEHYDROGENASE-ELEVATING VIRUS --METABO
E48       31       LACTATE DEHYDROGENASE-ELEVATING VIRUS --PATHOG

         Enter P or PAGE for more
?p

Ref    Items  Index-term
E49       43  LACTATE DEHYDROGENASE-ELEVATING VIRUS --PHYSIO
E50        1  LACTATE DEHYDROGENASE-ELEVATING VIRUS --RADIAT
```

```
?p

Ref    Items  Index-term
E1         1  LACTATE DEHYDROGENASE-ELEVATING VIRUS --RADIAT
E2         9  LACTATE DEHYDROGENASE-ELEVATING VIRUS --ULTRAS
E3         1  LACTATE RACEMASE
E4       103  LACTATE 2-MONOOXYGENASE
E5         2  LACTATE-MALATE TRANSHYDROGENASE
E6         1  LACTATE-2-SULFATE SULFATASE
E7         1  LACTATEA
E8         1  LACTATECARBONYL
E9         1  LACTATEC14
E10     1358  LACTATED
E11        1  LACTATEDECHYDROGENASE
E12       58  LACTATEDEHYDROGENASE

          Enter P or PAGE for more
?ds

Set      Items   Description
S1       27809   E3-E36
S2       27809   'LACTATE DEHYDROGENASE' OR DC='D8.586.682.47.547.'
S3       27809   'LACTATE DEHYDROGENASE'
?s (s1 or s2 or s3) and (eimeri? or coccidi? or parasit? or merozoit? or sporozoit?)
            27809  S1
            27809  S2
            27809  S3
             3195  EIMERI?
             7891  COCCIDI?
           116381  PARASIT?
             2292  MEROZOIT?
             2734  SPOROZOIT?
      S4      237  (S1 OR S2 OR S3) AND (EIMERI? OR COCCIDI? OR PARASIT? OR
                   MEROZOIT? OR SPOROZOIT?)
?s s4/1996:2003
              237  S4
          3434468  PY=1996 : PY=2003
      S5       82  S4/1996:2003
?s s4 not s5
              237  S4
               82  S5
      S6      155  S4 NOT S5
?s s6/1995
              155  S6
           416695  PY=1995
      S7        7  S6/1995
?s s6 not s7
              155  S6
                7  S7
      S8      148  S6 NOT S7
?s s8 and eimer?
              148  S8
             3216  EIMER?
      S9       20  S8 AND EIMER?
?t s9/9/all

 9/9/1
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

07362256   92225423   PMID: 1808028
   Enzyme variants of Eimeria parasitizing the domestic fowl and
possibilities of species diagnostics.
  Kucera J
  Research Institute for Feed Supplements and Veterinary Drugs, Prague,
Czechoslovakia.
  Folia parasitologica (CZECHOSLOVAKIA) 1991, 38 (3) p193-9, ISSN
0015-5683 Journal Code: 0065750
  Document type: Journal Article
```

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Electrophoretic variation of the enzymes lactate dehydrogenase (LDH) and glucosephosphate isomerase (GPI) of **Eimeria parasitizing** the domestic fowl in Czechoslovakia is summarized and the differentiation of species of poultry **coccidia** is discussed. A new method for evaluation of zymograms of **coccidial** enzymes is presented. This method enables the results of different experiments to be compared by calculating standardized rates of mobility of each enzyme band relative to the positions of reference variants coded LDH-8 or GPI-9.

Tags: Animal; Comparative Study; Male

Descriptors: **Coccidiosis** --veterinary--VE; * **Eimeria** --classification --CL; *Glucose-6-Phosphate Isomerase--analysis--AN; * **Lactate Dehydrogenase** --analysis--AN; *Poultry Diseases-- **parasitology** --PS; Chick Embryo; Chickens; **Coccidiosis** -- **parasitology** --PS; Czechoslovakia; **Eimeria** --enzymology--EN; Electrophoresis, Starch Gel; Poultry; Retrospective Studies

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)

Record Date Created: 19920518
Record Date Completed: 19920518

9/9/2

DIALOG(R)File 155:MEDLINE(R)

07299917 92162849 PMID: 1790225

Enzyme variation of Eimeria **acervulina and E. tenella isolated from poultry farms in Japan.**

Nakamura T; Kawaguchi H; Imose J; Ogimoto K

Aburahi Laboratory, Shionogi Research Laboratories, Shionogi & Co., Ltd., Shiga, Japan.

Journal of veterinary medical science / the Japanese Society of Veterinary Science (JAPAN) Dec 1991, 53 (6) p1101-3, ISSN 0916-7250 Journal Code: 9105360

Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Tags: Animal; Comparative Study

Descriptors: Chickens-- **parasitology** --PS; * **Coccidiosis** --veterinary--VE ; * **Eimeria** --enzymology--EN; * **Eimeria** tenella--enzymology--EN; *Poultry Diseases-- **parasitology** --PS; **Coccidiosis** -- **parasitology** --PS; **Eimeria** --classification--CL; **Eimeria** tenella--classification--CL; Electrophoresis, Starch Gel; Feces-- **parasitology** --PS; Glucose-6-Phosphate Isomerase --analysis--AN; Japan; **Lactate Dehydrogenase** --analysis--AN; Phenotype

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)

Record Date Created: 19920402
Record Date Completed: 19920402

9/9/3

DIALOG(R)File 155:MEDLINE(R)

06920706 91161087 PMID: 2488045

Starch gel electrophoresis of lactate dehydrogenase and glucose phosphate isomerase of poultry coccidia **using the LKB multiphor.**

Kucera J

Research Institute of Feed Supplements and Veterinary Drugs, Jilove, Prague, Czechoslovakia.

Folia parasitologica (CZECHOSLOVAKIA) 1989, 36 (4) p295-9, ISSN 0015-5683 Journal Code: 0065750

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

A modification of thin-layer starch gel horizontal electrophoresis is described. The original method of Wraxall and Culliford (1986) is improved so that the preparation of starch gel is as simple as preparing the agarose gel. Thus the commercially supplied kits and instruments for the agarose gel electrophoresis can be also used for the starch gel electrophoresis. Furthermore, a method of preparing the permanent dry enzymograms from the starch gels with visualized enzymes is presented. The described procedure was used in the LDH and GPI analyses of poultry **coccidia** .

Tags: Animal
Descriptors: **Eimeria** --enzymology--EN; *Glucose-6-Phosphate Isomerase --analysis--AN; * **Lactate Dehydrogenase** --analysis--AN; Electrophoresis, Starch Gel; Poultry
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)
Record Date Created: 19910417
Record Date Completed: 19910417

9/9/4
DIALOG(R)File 155:MEDLINE(R)

06736560 90362597 PMID: 2144028
Identification of Eimeria **brunetti using glucose phosphate isomerase and lactate dehydrogenase.**
Nakamura T; Kawaguchi H; Imose J
Aburahi Laboratories, Shionogi Research Laboratories, Shionogi & Co., Ltd., Shiga, Japan.
Nippon juigaku zasshi. The Japanese journal of veterinary science (JAPAN) Aug 1990, 52 (4) p859-60, ISSN 0021-5295 Journal Code: 0057113
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal
Descriptors: Chickens; * **Eimeria** --enzymology--EN; *Glucose-6-Phosphate Isomerase--analysis--AN; * **Lactate Dehydrogenase** --analysis--AN; **Coccidiosis** --diagnosis--DI; **Coccidiosis** -- **parasitology** --PS; **Coccidiosis** --veterinary--VE; **Eimeria** --isolation and purification--IP; Electrophoresis, Starch Gel--veterinary--VE; Feces-- **parasitology** --PS; Poultry Diseases--diagnosis--DI; Poultry Diseases-- **parasitology** --PS; Species Specificity; Specific Pathogen-Free Organisms
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)
Record Date Created: 19901004
Record Date Completed: 19901004

9/9/5
DIALOG(R)File 155:MEDLINE(R)

06146078 89161496 PMID: 2922510
Enzyme variation and pathogenicity of recent field isolates of Eimeria **tenella.**
Shirley M W; Chapman H D; Kucera J; Jeffers T K; Bedrnir P
Institute for Animal Health, Houghton Laboratory, Huntingdon, Cambridgeshire.
Research in veterinary science (ENGLAND) Jan 1989, 46 (1) p79-83, ISSN 0034-5288 Journal Code: 0401300
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Subfile: INDEX MEDICUS
Seventy isolates of **Eimeria** tenella, obtained from commercial poultry farms worldwide and four reference laboratory strains were characterised by studies on the electrophoretic mobility of up to three enzymes. All populations possessed the same electrophoretic form of lactate dehydrogenase and malate dehydrogenase and one of two forms of glucose phosphate isomerase. One isolate was characterised by both forms of glucose phosphate isomerase. Studies on several isolates indicated that there was no correlation between the form of glucose phosphate isomerase found and the pathogenicity of an isolate.
Tags: Animal; Comparative Study
Descriptors: **Eimeria** --enzymology--EN; *Glucose-6-Phosphate Isomerase --analysis--AN; * **Lactate Dehydrogenase** --analysis--AN; *Malate Dehydrogenase--analysis--AN; Chickens-- **parasitology** --PS; **Coccidiosis** -- **parasitology** --PS; **Coccidiosis** --veterinary--VE; **Eimeria** --isolation and purification--IP; **Eimeria** --pathogenicity--PY; Electrophoresis, Starch Gel; Poultry Diseases-- **parasitology** --PS
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.37 (Malate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)
Record Date Created: 19890411
Record Date Completed: 19890411

9/9/6
DIALOG(R)File 155:MEDLINE(R)

05281583 86282848 PMID: 3735889
Isozymes of chicken coccidia **in Japan.**
Nakamura T; Konishi T; Kawaguchi H
Nippon juigaku zasshi. The Japanese journal of veterinary science (JAPAN) Jun 1986, 48 (3) p587-90, ISSN 0021-5295 Journal Code: 0057113
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal
Descriptors: **Coccidiosis** --veterinary--VE; * **Eimeria** --enzymology--EN; *Glucose-6-Phosphate Isomerase--genetics--GE; *Isoenzymes--genetics--GE; * **Lactate Dehydrogenase** --genetics--GE; *Poultry Diseases-- **parasitology** --PS; **Coccidiosis** -- **parasitology** --PS; **Eimeria** --genetics--GE; Japan; Variation (Genetics)
CAS Registry No.: 0 (Isoenzymes)
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)
Record Date Created: 19860917
Record Date Completed: 19860917

9/9/7
DIALOG(R)File 155:MEDLINE(R)

04427277 84069417 PMID: 6646805
Studies to determine the taxonomic status of Eimeria **mitis, Tyzzer 1929 and E. mivati, Edgar and Seibold 1964.**
Shirley M W; Jeffers T K; Long P L
Parasitology (ENGLAND) Oct 1983, 87 (Pt 2) p185-98, ISSN 0031-1820 Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
We have examined several taxonomic features of a number of strains of **Eimeria** from many sources world wide. The strains were isolated on the basis of their small spherical (or sub-spherical) oocysts. From a study of mean oocyst dimensions, electrophoretic variation of enzymes, ability to

develop in embryonated eggs, absence of gross lesions in heavily infected chickens, and cross-immunity, all the strains were found to belong to one species. For convenience, the **parasites** when isolated, were referred to as strains of E. mitis/mivati-type, but after characterization they were clearly found to be E. mitis. In contrast, a laboratory strain of E. mivati supplied to one of us (M.W.S.) was found to be a mixture of E. acervulina and E. mitis. Evidence from these and other studies supports the notion that E. mivati is a nomina dubia.

Tags: Animal; Comparative Study; Male

Descriptors: Chickens-- **parasitology** --PS; * **Eimeria** --classification--CL ; Body Weight; Cross Reactions; **Eimeria** --immunology--IM; **Eimeria** --pathogenicity--PY; **Eimeria** --physiology--PH; Electrophoresis, Starch Gel; Glucose-6-Phosphate Isomerase--analysis--AN; Immunization; **Lactate Dehydrogenase** --analysis--AN

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)

Record Date Created: 19840107

Record Date Completed: 19840107

9/9/8

DIALOG(R)File 155:MEDLINE(R)

04090980 83220370 PMID: 6856328

Enzyme activity of the tissues of chicks with coccidiosis (Eimeria **tenella)]**

Aktivnost' nekotorykh fermentov tkanei tsypliat pri koktsidioze (**Eimeria** tenella).

Musaev M A; Elchiev Ia Ia; Mamedova G A

Parazitologiia (USSR) Mar-Apr 1983, 17 (2) p95-100, ISSN 0031-1847 Journal Code: 0101672

Document type: Journal Article ; English Abstract

Languages: RUSSIAN

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

It has been established that during experimental infection of chickens with **Eimeria** tenella the decrease in the activity of lactatdehydrogenase of blood serum and the increase of the activity of glutathionereductase in erythrocytes take place. In birds treated with chemcoccid (70 mg/kg of food) the activity of these ferments does not change. The ferment activity of glucose-6-phosphatdehydrogenase does not change in erythrocytes of sick birds while during the treatment with chemcoccid its activity increases. The activity of aspartate aminotransferase decreases in tissues of muscles and increases in liver and brain of sick birds. The activity of alanine aminotransferase decreases in the brain in three and increases in seven days after the infection.

Tags: Animal; Comparative Study

Descriptors: Chickens--metabolism--ME; * **Coccidiosis** --enzymology--EN; *Poultry Diseases--enzymology--EN; Brain--enzymology--EN; **Coccidiosis** --veterinary--VE; Erythrocytes--enzymology--EN; Glucosephosphate Dehydrogenase--blood--BL; Glutathione Reductase--blood--BL; Histocytochemistry; **Lactate Dehydrogenase** --blood--BL; Liver--enzymology--EN; Muscles --enzymology--EN; Transaminases--metabolism--ME

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.49 (Glucosephosphate Dehydrogenase); EC 1.6.4.2 (Glutathione Reductase); EC 2.6.1. (Transaminases)

Record Date Created: 19830708

Record Date Completed: 19830708

9/9/9

DIALOG(R)File 155:MEDLINE(R)

03844132 82256366 PMID: 7103889

Attenuation of a strain of Eimeria **mivati of U.S. origin by serial embryo passage.**

Long P L; Johnson J; Gore T C
Avian diseases (UNITED STATES) Apr-Jun 1982, 26 (2) p305-13, ISSN 0005-2086 Journal Code: 0370617
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

A strain of **Eimeria** mivati (FS50) isolated in Georgia was purified and serially passaged in groups of developing chicken embryos. Starch gel electrophoresis using glucose phosphate isomerase and lactate dehydrogenase showed the **parasite** to be similar to another strain of E. mivati isolated in the U.S. The embryo-passaged line of E. mivati (FS50) was less pathogenic than the parent line but retained its immunogenicity. This strain may be suitable for inclusion in an improved **coccidiosis** vaccine. The status of E. mivati and E. mitis is discussed.

Tags: Animal; Male; Support, Non-U.S. Gov't

Descriptors: Chick Embryo-- **parasitology** --PS; *Chickens-- **parasitology** --PS; * **Eimeria** --isolation and purification--IP; *Vaccines, Attenuated --isolation and purification--IP; **Coccidiosis** --prevention and control--PC ; **Coccidiosis** --veterinary--VE; **Eimeria** --enzymology--EN; **Eimeria** --immunology--IM; **Eimeria** --pathogenicity--PY; Electrophoresis, Starch Gel; Glucose-6-Phosphate Isomerase--analysis--AN; **Lactate Dehydrogenase** --analysis--AN; Poultry Diseases--prevention and control--PC; Vaccination --veterinary--VE

CAS Registry No.: 0 (Vaccines, Attenuated)

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)

Record Date Created: 19820924

Record Date Completed: 19820924

9/9/10

DIALOG(R)File 155:MEDLINE(R)

03804681 82216507 PMID: 7086714

The biology and pathogenicity of a recent field isolate of Eimeria **praecox Johnson, 1930.**

Gore T C; Long P L

Journal of protozoology (UNITED STATES) Feb 1982, 29 (1) p82-5, ISSN 0022-3921 Journal Code: 2985197R

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

A recent isolate of **Eimeria** praecox, strain G, was obtained from Georgia and purified. Studies of the life history, pathogenicity, and cross-immunity of the isolate were conducted to verify its identity. In inoculated three-week-old chickens, the occurrence of merogony and gametogony was limited to the superficial epithelium of the upper intestine. Oocysts, 23 x 19.5 microns, with a shape index of 1.17 were first observed 83 h after inoculation. Mortality and morbidity were not observed in any of the experimental birds. However, there was a positive correlation between dose of oocysts, reduced weight gain, and the incidence of exudative diathesis. These studies showed that E. praecox depresses weight gains in chickens and may be of economic importance. Although complete immunity to avian **coccidiosis** is believed to be species specific, chickens immune to E. praecox (G) or E. acervulina had a degree of cross-immunity to a heterologous challenge. Electrophoretic analysis of glucose phosphate isomerase and lactate dehydrogenase prepared from the European strain of E. praecox and E. praecox (G) showed no differences, confirming the identity of the isolate as E. praecox.

Tags: Animal; Male

Descriptors: Chickens-- **parasitology** --PS; * **Eimeria** --pathogenicity--PY; *Intestines-- **parasitology** --PS; Body Weight; **Coccidiosis** --immunology--IM ; Cross Reactions; **Eimeria** --growth and development--GD; **Eimeria** --immunology--IM; Glucosephosphate Dehydrogenase--analysis--AN; Isoenzymes

--analysis--AN; **Lactate Dehydrogenase** --analysis--AN
CAS Registry No.: 0 (Isoenzymes)
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.49 (Glucosephosphate Dehydrogenase)
Record Date Created: 19820807
Record Date Completed: 19820807

9/9/11
DIALOG(R)File 155:MEDLINE(R)

03068132 79246004 PMID: 471536
A reappraisal of the taxonomic status of Eimeria **mivati Edgar and Seibold 1964, by enzyme electrophoresis and cross-immunity tests.**
Shirley M W
Parasitology (ENGLAND) Apr 1979, 78 (2) p221-37, ISSN 0031-1820 Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
An examination of 2 strains of **Eimeria** acervulina var. mivati (since 1973 E. mivati has been regarded as a variant of E. acervulina) showed that previous confusion over the taxonomic status of E. mivati arose because the investigations were done using laboratory cultures of E. mivati which were contaiminated with E. acervulina. Electrophoretic analyses of enzymes, host specificity and cross-immunity tests have revealed that: (1) The 1971 Houghton strain of E. acervulina var. mivati was a mixture of 2 **parasites**. (a) Passage of this strain in embryonating eggs resulted in a selection against that **parasite** previously characterized as E. acervulina. (b) The **parasite** which did reproduce in eggs did not immunize chickens against subsequent challenge with E. acervulina. This **parasite** is most likely E. mivati. (c) E. mivati recovered from eggs did, however, immunize chickens against challenge with a new field strain which was morphologically identical to E. mivati and characterized by the same electrophoretic forms of 2 enzymes. (2) A strain of E. acervulina var. mivati from the USA was also a mixture of E. acervulina and E. mivati.
Tags: Animal
Descriptors: **Eimeria** --classification--CL; Chick Embryo; Cross Reactions; **Eimeria** --enzymology--EN; **Eimeria** --immunology--IM; Electrophoresis; Glucose-6-Phosphate Isomerase--analysis--AN; Glucosephosphate Dehydrogenase --analysis--AN; **Lactate Dehydrogenase** --analysis--AN; Phosphogluconate Dehydrogenase--analysis--AN
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.43 (Phosphogluconate Dehydrogenase); EC 1.1.1.49 (Glucosephosphate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)
Record Date Created: 19791024
Record Date Completed: 19791024

9/9/12
DIALOG(R)File 155:MEDLINE(R)

02924020 79099449 PMID: 735305
Alteration of enzyme activities in serum of Eimeria **stiedai infected rabbits (author's transl)]**
Veranderungen der Enzymaktivitaten im Serum bei **Eimeria** stiedai infizierten Kaninchen.
Hein B; Lammler G
Zeitschrift fur Parasitenkunde (Berlin, Germany) (GERMANY, WEST) Nov 27 1978, 57 (3) p199-211, ISSN 0044-3255 Journal Code: 8710749
Document type: Journal Article ; English Abstract
Languages: GERMAN
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

In experimental investigations on **Eimeria** stiedai infected rabbits, serum enzymatic studies have been carried out in correlation with the examination of **parasitological** and pathological parameters. The rabbits were orally infected with a single dose of either 100,000 or 250,000 sporulated oocysts. Increase of the activity of the sorbit dehydrogenase (SDH), glutamate oxalate transaminase (GOT), glutamate pyruvate transaminase (GPT) and glutamate dehydrogenase (GlDH) could be found first between 3 and 10 days after infection indicating the beginning of the acute phase of liver **coccidiosis** . The increase of the conjugated bilirubin and of the gamma-glutamyl-transferase (gamma-GT) could be found not earlier than 10 days after infection and is to be explained as sign of disturbed efficiency of excretion. The various investigated parameters reached their peak of alteration about the end of the prepatent period and at the beginning of patency between 14 and 21 days after infection. The results emphasize the value and usefulness of serum enzymes, particularly the glutamate dehydrogenase (GlDH) and the gamma-glutamyl-transferase (gamma-GT) with about 30fold activity, as indicators in the course of **Eimeria** stiedai infection of rabbits. The enzymes returned to physiological values at the end of the experiment, 42 days after infection. Significant differences could not be detected within the infected groups. The activities of the alkaline phosphatase (AP), leucine aminopeptidase (LAP), choline esterase (ChE), lactate dehydrogenase (LDH) and isoenzym 1 (alpha-HBDH) showed only slight alterations and proved to be no significant parameters for the pathophysiological evaluation of the liver **coccidiosis** .

Tags: Animal; Male

Descriptors: **Coccidiosis** --enzymology--EN; Bilirubin--blood--BL; **Coccidiosis** --blood--BL; **Coccidiosis** -- **parasitology** --PS; **Eimeria** --growth and development--GD; Glutamate Dehydrogenase--blood--BL; Hydrolases--blood--BL; Isoenzymes; L-Iditol 2-Dehydrogenase--blood--BL; **Lactate Dehydrogenase** --blood--BL; Rabbits; Transaminases--blood--BL

CAS Registry No.: 0 (Isoenzymes); 635-65-4 (Bilirubin)

Enzyme No.: EC 1.1.1.14 (L-Iditol 2-Dehydrogenase); EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.4.1.2 (Glutamate Dehydrogenase); EC 2.6.1. (Transaminases); EC 3. (Hydrolases)

Record Date Created: 19790324

Record Date Completed: 19790324

9/9/13

DIALOG(R)File 155:MEDLINE(R)

02903907 79078933 PMID: 726560

Electrophoretic variation of enzymes: a further marker for genetic studies of the Eimeria .

Shirley M W

Zeitschrift fur Parasitenkunde (Berlin, Germany) (GERMANY, WEST) Sep 4 1978, 57 (1) p83-7, ISSN 0044-3255 Journal Code: 8710749

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Embryo-adapted strains of **Eimeria** mivati and E. mivati var. diminuta, differing in their sensitivity to sulphaquinoxaline and electrophoretic mobilities of lactate dehydrogenase, were crossed. E. mivati was sulphaquinoxaline-resistant and characterised by an electrophoretic form of the enzyme denoted lactate dehydrogenase-1 whereas E. mivati var. diminuta was sulphaquinoxaline-sensitive and characterised by lactate dehydrogenase-6. Progeny recovered from the cross were passaged in embryonating eggs given sulphaquinoxaline and the (drug-resistant) **parasites** recovered were characterised by both lactate dehydrogenase-1 and lactate dehydrogenase-6. Controls showed that those **parasites** characterised by the recombinant phenotype of drug-resistant and lactate dehydrogenase-6 had been produced by the cross-fertilisation of gametes.

Tags: Animal

Descriptors: **Eimeria** --genetics--GE; * **Lactate Dehydrogenase** --genetics --GE; *Recombination, Genetic; Chick Embryo-- **parasitology** --PS; Drug

Resistance, Microbial; **Eimeria** --drug effects--DE; **Eimeria** --enzymology --EN; **Eimeria** --physiology--PH; Isoenzymes; **Lactate Dehydrogenase** --biosynthesis--BI; Spores; Sulfaquinoxaline--pharmacology--PD
CAS Registry No.: 0 (Isoenzymes); 59-40-5 (Sulfaquinoxaline)
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase)
Record Date Created: 19790221
Record Date Completed: 19790221

9/9/14
DIALOG(R)File 155:MEDLINE(R)

02625433 78051975 PMID: 927886
Strain variations within Eimeria **meleagrimitis from the turkey.**
Long P L; Millard B J; Shirley M W
Parasitology (ENGLAND) Oct 1977, 75 (2) p177-82, ISSN 0031-1820
Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
During the course of a field study of **coccidiosis** in turkeys, **Eimeria** oocysts were found which had much smaller dimensions that any previously recorded isolate from the turkey. These oocysts were purified by single oocyst infection of a turkey. The first oocysts (mean dimensions 16-15 X 14-75 micrometer) were recovered 103 h later. Inoculation of between 0-5 and 2-5 X 10(5) oocysts of this isolate caused severe effects on body weight gain. Cross-immunity studies showed the **parasite** to be a strain of E. meleagrimitis. Electrophoretic analyses of two enzymes showed that the strain could be differentiated from another strain of E. meleagrimitis (Weybridge strain B). The results show that strain variation occurs within the species E. meleagrimitis and extreme caution should be used in identifying species of **Eimeria** from the turkey by the oocyst characters.
Tags: Animal
Descriptors: **Eimeria** --classification--CL; *Turkeys-- **parasitology** --PS ; **Eimeria** --pathogenicity--PY; **Eimeria** --physiology--PH; Glucose-6-Phosphate Isomerase--analysis--AN; **Lactate Dehydrogenase** --analysis--AN; Species Specificity
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)
Record Date Created: 19780127
Record Date Completed: 19780127

9/9/15
DIALOG(R)File 155:MEDLINE(R)

02625432 78051974 PMID: 927885
Studies on the growth, chemotherapy and enzyme variation of Eimeria **acervulina var. diminuta and E. acervulina var. mivati.**
Shirley M W; Millard B J; Long P L
Parasitology (ENGLAND) Oct 1977, 75 (2) p165-76, ISSN 0031-1820
Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Eimeria acervulina var. diminuta was serially passaged 12 times in chicken embryos, but growth in cultured chick kidney cells was limited to 2 generations of schizonts. After 7 embryo passages the sensitivities of E. acervulina var. diminuta and an embryo-adapted strain of E. acervulina var. mivati to the anticoccidial drugs amprolium, methyl benzyquate, robenidine and sulphaquinoxaline were compared. Both **parasites** were sensitive to all the anticoccidials but E. acervulina var. diminuta was more sensitive to sulphaquinoxaline and amprolium. The chicken-maintained strain of E.

acervulina var. diminuta was extremely sensitive to clopidol, sulphaquinoxaline and decoquinate. Electrophoretic analyses of several enzymes from E. acervulina var. diminuta revealed enzyme profiles with similarities and differences to the embryo-adapted strain of E. acervulina var. mivati.
Tags: Animal; Comparative Study
Descriptors: **Coccidiostats** --pharmacology--PD; * **Eimeria** ; Cells, Cultured; **Eimeria** --drug effects--DE; **Eimeria** --enzymology--EN; **Eimeria** --growth and development--GD; Glucose-6-Phosphate Isomerase --analysis--AN; Glucosephosphate Dehydrogenase--analysis--AN; **Lactate Dehydrogenase** --analysis--AN; Oxidoreductases--analysis--AN; Phosphoglucomutase--analysis--AN
CAS Registry No.: 0 (Coccidiostats)
Enzyme No.: EC 1. (Oxidoreductases); EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.49 (Glucosephosphate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase); EC 5.4.2.2 (Phosphoglucomutase)
Record Date Created: 19780127
Record Date Completed: 19780127

9/9/16
DIALOG(R)File 155:MEDLINE(R)

02477294 77167679 PMID: 859094
Isoelectric focusing of coccidial **enzymes.**
Shirley M W; Lee D L
Journal of parasitology (UNITED STATES) Apr 1977, 63 (2) p390-2, ISSN 0022-3395 Journal Code: 7803124
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal
Descriptors: **Eimeria** --enzymology--EN; Isoelectric Focusing; Isoenzymes; **Lactate Dehydrogenase** --isolation and purification--IP
CAS Registry No.: 0 (Isoenzymes)
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase)
Record Date Created: 19770630
Record Date Completed: 19770630

9/9/17
DIALOG(R)File 155:MEDLINE(R)

02125300 76076735 PMID: 1202411
Enzyme variation in Eimeria **species of the chicken.**
Shirley M W
Parasitology (ENGLAND) Dec 1975, 71 (3) p369-76, ISSN 0031-1820 Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
A method for the biochemical identification of protozoa belonging to the genus **Eimeria** is described for the first time. Starch gel electrophoresis of the enzymes lactate dehydrogenase, glucose phosphate isomerase, 6-phosphogluconate dehydrogenase and glucose-6-phosphate dehydrogenase from **parasite** extracts revealed both intra- and inter-species differences when 11 strains representative of 6 species of **Eimeria** were examined. Oocysts were the most accessible **parasite** stage for investigation but **sporozoites** and **merozoites** of an embryo-adapted strain of E. tenella were also examined for enzyme activity.
Tags: Animal
Descriptors: Chickens-- **parasitology** --PS; * **Eimeria** --enzymology--EN; Chick Embryo; Glucose-6-Phosphate Isomerase--metabolism--ME; Glucosephospha

te Dehydrogenase--metabolism--ME; **Lactate Dehydrogenase** --metabolism--ME; Phosphogluconate Dehydrogenase--metabolism--ME
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.43 (Phosphogluconate Dehydrogenase); EC 1.1.1.49 (Glucosephosphate Dehydrogenase); EC 5.3.1.9 (Glucose-6-Phosphate Isomerase)
Record Date Created: 19760301
Record Date Completed: 19760301

9/9/18
DIALOG(R)File 155:MEDLINE(R)

01460771 73083928 PMID: 4346146
Enzymes of coccidia **: purification and properties of L-lactate dehydrogenase from** Eimeria **stiedae.**
Frandsen J C; Cooper J A
Experimental parasitology (UNITED STATES) Dec 1972, 32 (3) p390-402, ISSN 0014-4894 Journal Code: 0370713
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal
Descriptors: **Eimeria** --enzymology--EN; * **Lactate Dehydrogenase** --isolation and purification--IP; Ammonium Sulfate; Buffers; Centrifugation ; Chromatography, Gel; Dialysis; **Eimeria** --isolation and purification--IP; Electrophoresis, Disc; Hydrogen-Ion Concentration; Isoenzymes; Kinetics; Lactates; Liver--microbiology--MI; Methods; NAD; Oxidation-Reduction; Pressure; Pyruvates; Rabbits; Temperature
CAS Registry No.: 0 (Buffers); 0 (Isoenzymes); 0 (Lactates); 0 (Pyruvates); 53-84-9 (NAD); 7783-20-2 (Ammonium Sulfate)
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase)
Record Date Created: 19730319
Record Date Completed: 19730319

9/9/19
DIALOG(R)File 155:MEDLINE(R)

00806844 70113596 PMID: 5414955
Eimeria **stiedae: cytochemical identification of enzymes and lipids in** sporozoites **and endogenous stages.**
Frandsen J C
Experimental parasitology (UNITED STATES) Feb 1970, 27 (1) p100-15, ISSN 0014-4894 Journal Code: 0370713
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS
Descriptors: **Eimeria** --analysis--AN; * **Eimeria** --enzymology--EN; *Lipids--analysis--AN; Acid Phosphatase--analysis--AN; Alkaline Phosphatase --analysis--AN; **Eimeria** --cytology--CY; **Eimeria** --growth and development --GD; Esterases--analysis--AN; Fructose-Bisphosphate Aldolase--analysis--AN ; Galactosidases--analysis--AN; Glucosephosphate Dehydrogenase--analysis --AN; Glucosidases--analysis--AN; Histocytochemistry; **Lactate Dehydrogenase** --analysis--AN; Leucyl Aminopeptidase--analysis--AN; Metamorphosis, Biological
CAS Registry No.: 0 (Lipids)
Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.49 (Glucosephosphate Dehydrogenase); EC 3.1. (Esterases); EC 3.1.3.1 (Alkaline Phosphatase); EC 3.1.3.2 (Acid Phosphatase); EC 3.2.1.- (Galactosidases); EC 3.2.1.- (Glucosidases); EC 3.4.11.1 (Leucyl Aminopeptidase); EC 4.1.2.13 (Fructose-Bisphosphate Aldolase)
Record Date Created: 19700402
Record Date Completed: 19700402

9/9/20
DIALOG(R)File 155:MEDLINE(R)

00547925 69079196 PMID: 5701763

Eimeria stiedae: cytochemical identification of acid and alkaline phosphatases, carboxylic ester hydrolases, and succinate, lactate, and glucose-6-phosphate dehydrogenases in endogenous stages from rabbit tissues.

Frandsen J C

Experimental parasitology (UNITED STATES) Dec 1968, 23 (3) p398-411, ISSN 0014-4894 Journal Code: 0370713

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Tags: Animal

Descriptors: **Eimeria** --enzymology--EN; *Enzymes--analysis--AN; Acid Phosphatase--analysis--AN; Alkaline Phosphatase--analysis--AN; Esterases --analysis--AN; Glucosephosphate Dehydrogenase--analysis--AN; Histocytochem istry; **Lactate Dehydrogenase** --analysis--AN; Liver--enzymology--EN; Rabbits; Succinate Dehydrogenase--analysis--AN

CAS Registry No.: 0 (Enzymes)

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase); EC 1.1.1.49 (Glucosephosphate Dehydrogenase); EC 1.3.99.1 (Succinate Dehydrogenase); EC 3.1. (Esterases); EC 3.1.3.1 (Alkaline Phosphatase); EC 3.1.3.2 (Acid Phosphatase)

Record Date Created: 19690217

Record Date Completed: 19690217

?ds

STIC-ILL

VR 10 5/15

445981

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:41 AM
T : STIC-ILL
Cc: Smith, Lynette
Subj ct: 09/380,846; references requested for lactate dehydrogenase claims

2125300 76076735 PMID: 1202411
Enzyme variation in Eimeria species of the chicken.
Shirley M W
Parasitology (ENGLAND) Dec 1975, 71 (3) p369-76, ISSN 0031-1820
Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

102(6)
Claims
1-3, 11, 13, 16-20, 23, 24, 11
Nucleic acid intended use

10579957

10584353

NO 5/15

STIC-ILL

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:37 AM
To: STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

#459976

06920706 91161087 PMID: 2488045
Starch gel electrophoresis of lactate dehydrogenase and glucose phosphate isomerase of poultry coccidia using the LKB multiphor.
Kucera J
Research Institute of Feed Supplements and Veterinary Drugs, Jilove, Prague, Czechoslovakia.
Folia parasitologica (CZECHOSLOVAKIA) 1989, 36 (4) p295-9, ISSN 0015-5683 Journal Code: 0065750
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

436.8.C33

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

102(6)
Claims 1-3, 18
1-3, 16-18, 23
Claims intended use

STIC-ILL

NO 5/15

4453977

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:36 AM
To: STIC-ILL
Cc: Smith, Lynette
Subj ct: 09/380,846; references requested for lactate dehydrogenase claims

Importance: High

07299917 92162849 PMID: 1790225
Enzyme variation of Eimeria acervulina and E. tenella isolated from poultry farms in Japan.
Nakamura T; Kawaguchi H; Imose J; Ogimoto K
Aburahi Laboratory, Shionogi Research Laboratories, Shionogi & Co., Ltd., Shiga, Japan.
Journal of veterinary medical science / the Japanese Society of Veterinary Science (JAPAN) Dec 1991, 53 (6) p1101-3, ISSN 0916-7250
Journal Code: 9105360
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

102(6)
Claims 1-3, 18, 16, 17
23 - 10567918
macro included

Val no 5/15

STIC-ILL

4/4/5 982

From: Portner, Ginny
Sent: Thursday, May 15, 2003 11:39 AM
T : STIC-ILL
Cc: Smith, Lynette
Subject: 09/380,846; references requested for lactate dehydrogenase claims

03068132 79246004 PMID: 471536
A reappraisal of the taxonomic status of Eimeria mivati Edgar and Seibold 1964, by enzyme electrophoresis and cross-immunity tests.
Shirley M W
Parasitology (ENGLAND) Apr 1979, 78 (2) p221-37, ISSN 0031-1820
Journal Code: 0401121
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

448.8.P21

Ginny Portner
CM1, Art Unit 1645
Room 7e13
Mail box 7e12
(703) 308-7543

7.96

10579950